

NPL Site Narrative for Arnold Engineering Develop. Ctr. (USAF)

ARNOLD ENGINEERING DEVELOPMENT CENTER (USAF)

Coffee and Franklin Counties, Tennessee

Federal Register Notice: [August 23, 1994](#)

Arnold Engineering Development Center (AEDC) is located in Coffee and Franklin Counties in south-central Tennessee near the cities of Manchester and Tullahoma. AEDC comprises approximately 32,000 acres of land, formerly occupied by Camp Forrest Army Training Center, part of which was conveyed to the Federal Government by the State of Tennessee in the Public Acts of 1951. In 1950 and 1951, AEDC purchased approximately 7,000 acres of additional land that created the 4,000-acre Woods Reservoir, which provides cooling water for AEDC's test facilities. AEDC also includes a 3,000-foot airstrip. Approximately 30,000 acres of AEDC property is heavily forested and covered under a management plan allowing the Tennessee Wildlife Resources Agency to operate and manage a wildlife program.

AEDC is a test organization of the Air Force Material Command and its primary mission is to simulate actual flight conditions in aerodynamic, propulsion, and space ground-test facilities. In addition, AEDC conducts research and applies new technology to improve environmental facilities and associated testing

techniques and instrumentation.

Several potentially contaminated source areas are located at AEDC, including Landfill No.2, Leaching Pit No.2, Retention Reservoir, and the Main Testing Area. Landfill No. 2 is a 15-acre landfill used for disposal of hazardous wastes. Leaching Pit No. 2 was used for disposal of chrome plating solutions and other acidic wastes. The Retention Reservoir is a 175-acre impoundment which is used as a retention basin for wastewaters and surface water runoff. Polychlorinated biphenyls (PCBs), trichloroethane, methylene chloride, and toluene are reported to have entered the Retention Reservoir. The Main Testing Area, situated on developed lands in the central portion of AEDC, has been the site of a wide variety of waste handling activities and spills involving jet and rocket fuels, chlorofluorocarbon solvents, nitric acid, and other shop wastes. PCBs have been detected in soil samples collected at the Main Testing Area.

Surface water runoff from the Main Testing Area enters Woods Reservoir via several streams. The AEDC drinking water intake, which serves 3,800 workers, is located at the confluence of Brumalow Creek and Woods Reservoir.

PCBs, from sources located at AEDC, have been detected in surface water and sediment samples collected from multiple locations downstream; in fish tissue samples collected from Rollins/Rowland Creek; and in surface water samples collected from Bradley Creek and Brumalow Creek within the wildlife management area boundaries.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See [56 FR 5600](#), February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic

Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at <http://www.atsdr.cdc.gov/toxfaq.html> or by telephone at 1-888-42-ATSDR or 1-888-422-8737.